D1 Cont.

respective regions of a double stranded target nucleic acid so that the padlock probe can be circularized by joining said free end parts to thereby catenate with the target sequence wherein said target sequence is directly inhibited.

D2

9. The composition according to Claim 7, further comprising a linking agent, wherein said linking agent is capable of joining said two free nucleic acid end parts.

D3

11. The composition according to Claim 7, wherein said end parts further comprise a mutually chemically reactive compound.

Sub E1

12. The composition according to any one of Claims 7, 9, 10, 11, or 12, wherein said padlock probe comprises a non-natural nucleic acid or polymer.

REMARKS

Claim 10 and amended claims 7, 9, 11 and 12 are pending. Claim 8 has been cancelled. Support for amended claim 7 is found on page 1, lines 3-12, page 4, lines 23-27, page 5, lines 1-12 and 18-29, and page 8, lines 28-30 of the specification. Claims 9, 11 and 12 are amended for purposes of clarity.

Claim 7 has been amended to recite a composition for targeting double stranded nucleic acids, the composition comprising a pharmaceutically acceptable carrier and an effective amount of a padlock probe oligonucleotide having two free nucleic acid end parts which are at least partially complementary to and capable of hybridizing with at least substantially neighboring respective regions of a double stranded target nucleic acid so that the padlock probe can be circularized by joining the free end parts to thereby catenate with the target sequence wherein the target sequence is directly inhibited.